

ABSTRACT OF THE DISCLOSURE

A rod integrator includes a quadrangular prismatic light-guiding member with rectangular cross-sectional shape. The light-guiding member guides the beam from the 5 first end surface to the second end surface opposing the first end surface while causing the beam to be reflected by the side surfaces such that the beam is outputted from the second end surface. The rod integrator includes a tube-shape body having the first open end portion tightly 10 surrounding the end portion of the light-guiding member on the side of the second end surface, and having the second open end portion from which the beam is outputted while causing the beam from the first end portion to be reflected by inner mirror surfaces of the tube-shape body. The 15 tube-shape body is arranged, in a pinwheel shape, a first, second, third, and fourth member, each of which is in plate shape and has a mirror surface on one side, onto the light-guiding member, such that the tube-shape body has the mirror surfaces facing inside thereof.

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